

#6/A  
2-13-04  
[Signature]

**Facsimile Transmission**

**RE: US Patent Application 09/498,012**

Date: January 15, 2004

To: **Examiner Herng Der Day, Examining Group 2123**  
Facsimile No. 1-703-746-9166

From: E. Eugene Thigpen  
Facsimile No. 1-281-589-1482  
Telephone No. 1-281-679-2288

Number of Pages in this transmission 31

*E. Eugene Thigpen*  
*Jan. 15, 2004*

**In the United States Patent and Trademark Office**

|  |   |                             |
|--|---|-----------------------------|
| In re application of:  | § | Group Art Unit: 2123        |
| Craig M. Jarchow   | § |                             |
|  | § |                             |
| Serial No: 09/498,012  | § | Examiner: Day, Herng Der    |
|  | § |                             |
| Filed: February 4, 2000  | § | Attorney Docket No. APA-001 |
| Title: System for Estimating Thickness of Thin Subsurface Strata |   |                             |

**Attention:**

**Examiner Hereng Der Day**  
US Patent and Trademark Office  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Attached is a copy of the Response to Office Action on the above-captioned patent application that I mailed to USPTO on September 26, 2003. A copy of the returned Confirmation Postcard, showing a date of receipt of September 29, 2003 is also attached.

The Response to Office Action included a Response to the Office Action, a Request for Extension of Time, and a Letter to the Official Draftsperson with copies of formal drawings attached.

Respectfully submitted,

E. Eugene Thigpen

Registration Number 27,400

Application No: 09/498,012  
Filing Date: February 4, 2000  
Inventor: Jarchow, Craig  
Attorney Docket: APA-001



- Transmittal Form
- Fee Transmittal Form (in duplicate)
- Amendment/Response to Office Action
- Request for Extension of Time (in duplicate)
- Letter to Official Draftsperson
- 7 sheets of Formal Drawings
- Check

Application No: 09/498,012  
Filing Date: February 4, 2000  
Inventor: Jarchow, Craig  
Attorney Docket: APA-001

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- Amendment/Response to Office Action
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EUGENE THIGPEN  
PH. 713-266-2017  
10719 DEERWOOD DR.  
HOUSTON, TX 77042

32-6142  
1110  
942066694

4273

DATE

Sept 26, 2003

Commissioner for Patents

PAY TO THE ORDER OF

Three hundred thirty and no/100

\$ 930 <sup>60</sup>/<sub>100</sub>

DOLLARS

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MEMO APA-001-ROA

Eugene Thigpen

⑆ 1110006141⑆

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PTO/88/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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|   |                        |                   |
|---|------------------------|-------------------|
| <b>TRANSMITTAL FORM</b><br>(to be used for all correspondence after initial filing) | Application Number     | 09460,012         |
|   | Filing Date            | February 04, 2000 |
|   | First Named Inventor   | Jarchow, Craig M. |
|   | Art Unit               | 2123              |
|   | Examiner Name          | Day, Henry Der    |
|   | Attorney Docket Number | APA-001           |
| Total Number of Pages in This Submission  |                        | 35                |

| ENCLOSURES (Check all that apply)   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input checked="" type="checkbox"/> Fee Attached<br><input checked="" type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input checked="" type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input checked="" type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) | <input type="checkbox"/> After Allowance communication to Technology Center (TC)<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>-Postcard<br>-Letter to Official Draftsperson |
| Remarks   |   |  |
| <b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>   |   |  |
| Firm or Individual name   | E. Eugene Thigpen, Attorney Registration No: 27,400   |  |
| Signature   | <i>E. Eugene Thigpen</i>  |  |
| Date  | September 28, 2003  |  |

| CERTIFICATE OF TRANSMISSION/MAILING   |                          |                         |
|---|--------------------------|-------------------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. |                          |                         |
| Typed or printed name   | E. Eugene Thigpen        |                         |
| Signature   | <i>E. Eugene Thigpen</i> | Date September 28, 2003 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (08-08)

Approved for use through 07/31/2008. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**FEE TRANSMITTAL**  
**for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$)** 930.00**Complete if Known**

|                      |                   |
|----------------------|-------------------|
| Application Number   | 09/498,012        |
| Filing Date          | February 04, 2000 |
| First Named Inventor | Jarchow, Craig M. |
| Examiner Name        | Day, Heng Der     |
| Art Unit             | 2123              |
| Attorney Docket No.  | APA-001           |

**METHOD OF PAYMENT (check all that apply)**☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description        | Fee Paid      |
|-------------------------------|-------------------------------|------------------------|---------------|
| 1001 750                      | 2001 375                      | Utility filing fee     |               |
| 1002 330                      | 2002 165                      | Design filing fee      |               |
| 1003 520                      | 2003 260                      | Plant filing fee       |               |
| 1004 750                      | 2004 375                      | Reissue filing fee     |               |
| 1005 160                      | 2005 80                       | Provisional filing fee |               |
| <b>SUBTOTAL (1)</b>           |                               |                        | <b>(\$)</b> 0 |

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims       | Extra Claims | Fee from | Fee Paid |
|--------------------|--------------|----------|----------|
| Independent Claims | -20** =      | X        |          |
| Multiple Dependent | -3** =       | X        |          |

| Large Entity<br>Fee Code (\$) | Small Entity<br>Fee Code (\$) | Fee Description  |
|-------------------------------|-------------------------------|--|
| 1202 18                       | 2202 9                        | Claims in excess of 20                                     |
| 1201 84                       | 2201 42                       | Independent claims in excess of 3                          |
| 1203 280                      | 2203 140                      | Multiple dependent claim, if not paid                      |
| 1204 84                       | 2204 42                       | ** Release independent claims over original patent         |
| 1205 18                       | 2205 9                        | ** Release claims in excess of 20 and over original patent |
| <b>SUBTOTAL (2)</b>           |                               |  |

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

| Large Entity<br>Fee Code (\$)     | Small Entity<br>Fee Code (\$) | Fee Description  | Fee Paid        |
|-----------------------------------|-------------------------------|--|-----------------|
| 1051 130                          | 2051 65                       | Surcharge - late filing fee or oath  |                 |
| 1052 50                           | 2052 25                       | Surcharge - late provisional filing fee or cover sheet                     |                 |
| 1053 130                          | 2053 65                       | Non-English specification  |                 |
| 1812 2,520                        | 2812 1,260                    | For filing a request for ex parte reexamination                            |                 |
| 1804 820*                         | 2804 410*                     | Requesting publication of SIR prior to Examiner action                     |                 |
| 1805 1,840*                       | 2805 920*                     | Requesting publication of SIR after Examiner action                        |                 |
| 1251 110                          | 2251 55                       | Extension for reply within first month                                     |                 |
| 1252 410                          | 2252 205                      | Extension for reply within second month                                    |                 |
| 1253 830                          | 2253 415                      | Extension for reply within third month                                     |                 |
| 1254 1,450                        | 2254 725                      | Extension for reply within fourth month                                    |                 |
| 1255 1,970                        | 2255 985                      | Extension for reply within fifth month                                     |                 |
| 1401 320                          | 2401 160                      | Notice of Appeal   |                 |
| 1402 320                          | 2402 160                      | Filing a brief in support of an appeal                                     |                 |
| 1403 280                          | 2403 140                      | Request for oral hearing   |                 |
| 1451 1,510                        | 2451 755                      | Petition to institute a public use proceeding                              |                 |
| 1452 110                          | 2452 55                       | Petition to revive - unavoidable   |                 |
| 1453 1,300                        | 2453 650                      | Petition to revive - unintentional   |                 |
| 1501 1,300                        | 2501 650                      | Utility issue fee (or reissue)   |                 |
| 1502 470                          | 2502 235                      | Design issue fee   |                 |
| 1503 630                          | 2503 315                      | Plant issue fee  |                 |
| 1480 130                          | 2480 65                       | Petitions to the Commissioner  |                 |
| 1807 50                           | 2807 25                       | Processing fee under 37 CFR 1.17(g)  |                 |
| 1808 180                          | 2808 90                       | Submission of Information Disclosure Stmt                                  |                 |
| 8021 40                           | 28021 20                      | Recording each patent assignment per property (times number of properties) |                 |
| 1608 750                          | 2608 375                      | Filing a submission after final rejection (37 CFR 1.129(a))                |                 |
| 1810 750                          | 2810 375                      | For each additional invention to be examined (37 CFR 1.129(b))             |                 |
| 1801 750                          | 2801 375                      | Request for Continued Examination (RCE)                                    |                 |
| 1802 900                          | 2802 450                      | Request for expedited examination of a design application                  |                 |
| Other fee (specify):              |                               |  |                 |
| *Reduced by Basic Filing Fee Paid |                               |  |                 |
| <b>SUBTOTAL (3)</b>               |                               |  | <b>(\$)</b> 930 |

**SUBMITTED BY**

|                   |                   |                                   |            |           |              |
|-------------------|-------------------|-----------------------------------|------------|-----------|--------------|
| Name (Print/Type) | E. Eugene Thigpen | Registration No. (Attorney/Agent) | 27,400     | Telephone | 713-266-2017 |
| Signature         | E. Eugene Thigpen | Date                              | 09/26/2003 |           |              |

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